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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/916,001	07/26/2001	Miikka Huomo	4925-112	1120

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EXAMINER

RAMOS FELICIANO, ELISEO

ART UNIT	PAPER NUMBER
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2681

DATE MAILED: 05/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/916,001

Applicant(s)

HUOMO ET AL.

Examiner

Eliseo Ramos-Feliciano

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 7/24/01
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 July 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>5.6</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to because they include rectangular boxes without appropriate legends. For example, elements 36, 38, 40 need appropriate legends. Empty or not labeled rectangular boxes in a circuit are not descriptive, and therefore incomplete. See 37 CFR 1.83(a) and 1.84(o).

### *Information Disclosure Statement*

2. The references listed in the Information Disclosure Statement filed on February 19, 2002 and March 11, 2003 have been considered by the examiner (see attached PTO-1449 form).

### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. **Claim 24** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 24 recites the limitation "The method of claim 21, further comprising the step of:" in line 1. Claim 21 is a system claim, not a method claim. There is insufficient antecedent basis for this limitation in the claim.

In addition, claim 24 appears to a hybrid type claim being a single claim which claims both an apparatus and method steps; therefore, indefinite. See MPEP 2173.05(p).

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5. **Claims 6 and 23** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 6 and 23 recite the limitation "sufficient to allow" in line 2. The specification fails to define what is "sufficient" so that one skilled in the art could determine specific values for the amount (of time) based on the disclosure. The specification states "any period of time may be selected"; see paragraph 0026. It is unclear how much time is "sufficient" as to the scope of the claim. "Sufficient" leaves such a wide variety of possibilities that the scope of the claim becomes indefinite.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. **Claims 1-5, 8-22, and 25-35** are rejected under 35 U.S.C. 102(b) as being anticipated by MeLampy et al. (US Patent Number 5,862,208).

Regarding **claim 1**, MeLampy et al. discloses a method for handing over a mobile wireless connection established over a network. The method enables a party operating a wireless terminal to change terminals during a call; see title, abstract, and column 3, lines 49-55. The basic device used for implementing the invention is a switching system or center (5, 8); see Figure 1 and column 4, lines 10-25. The wireless connection is between a mobile terminal (11, 14, or 15) having a first address and a terminal (telephone terminal; outside caller) having a

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second address (for McLampy et al.'s "address" definition see column 4, lines 59-61, column 9, lines 1-5, and column 3, line 25). The wireless connection is established through the switching center; see column 12, lines 4-18.

The system monitors the occurrence of "triggers" (condition) that fire when certain events occur, such as signals below minimum thresholds, or loss of battery power, etc; see column 3, lines 5-8, column 5, lines 15-16, column 6, lines 42-50; column 1, lines 30-35, and column 2, lines 25-52. Therefore, the method includes monitoring a condition of at least one of said mobile wireless connection (e.g. when signals are below minimum thresholds) and said mobile terminal (e.g. the battery power level).

When the trigger event occurs (the condition attains a predetermined state), the wireless connection (call in progress) is re-routed through the switching center to another terminal, voicemail, or a receptionist, *inter alia*, any of which read as "a transfer address", as claimed. See column 2, lines 25-52, column 3, lines 49-55, column 4, lines 46-50. Therefore, the method further includes sending a handover request to said switching center when said condition attains a predetermined state to re-route said mobile wireless connection from said first address (mobile terminal) to a transfer address (another terminal, voicemail, or receptionist) on said network through said switching center (5, 8).

The method further includes establishing a transfer connection between the second address (telephone terminal) and the transfer address (another terminal, voicemail, or receptionist). See column 12, lines 16-18, and citations above.

As to **claim 18**, it is a corresponding apparatus claim of method *claim 1*; therefore, same reasons explained above are applied.

Regarding **claims 2 and 19**, McLampy et al. discloses everything claimed as applied above (see *claims 1 and 18*). In addition, McLampy et al. further discloses that the predetermined state can be a disconnect (“unwanted disconnection”) of said mobile wireless connection not resulting from a disconnect signal generated by either the mobile terminal of the telephone terminal. See column 5, lines 15-16, and column 1, lines 30-35. For example, due to loss of battery power in the mobile terminal.

Regarding **claims 3-4 and 20-21**, McLampy et al. discloses everything claimed as applied above (see *claims 1 and 18*). In addition, McLampy et al. further discloses that the condition is at least one of: ① a level of power of a battery in said mobile terminal (e.g. loss of battery power); inherently, whether or not the battery power is less than a predetermined threshold (low battery); and ② a break in the mobile wireless connection (e.g. due to signals below minimum thresholds); column 1, lines 30-35. “Signal lost”; column 6, line 58.

Regarding **claims 5 and 8**, McLampy et al. discloses everything claimed as applied above (see *claim 1*). In addition, McLampy et al.’s method further includes placing the mobile wireless connection on hold; column 3, line 20-21, column 6, line 57.

After a predetermined period of time, the system attempts to re-establish the connection between the mobile terminal (first address) the terminal (second address); column 3, lines 15-30, column 6, lines 56-61. Therefore, the method further includes attempting to re-establish the mobile wireless connection between the first address (mobile terminal) and the second address (telephone terminal; outside caller) after a predetermined period of time has elapsed from the time the mobile wireless connection (call) has been broken, the transfer address being the first address.

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Should reconnection not be an option (cannot be re-established), the caller is directed (re-routed) to a voicemail (second transfer address); column 6, lines 60-61. Therefore, the method further includes: if the mobile wireless connection (call) between the first address (mobile terminal) and the second address (telephone terminal; outside caller) cannot be re-established, re-routing the mobile wireless connection (call) to a second transfer address (voicemail), the second transfer address (voicemail) being other than the first address (mobile terminal).

As to **claims 22 and 25**, they are the corresponding apparatus claims of method *claims 5 and 8*; therefore, the same reasons explained above are applied.

Regarding **claims 9 and 17**, McLampy et al. discloses everything claimed as applied above (see *claim 3*). In addition, McLampy et al.'s method further includes informing the second user (telephone terminal; outside caller) that the mobile wireless connection (call) is being re-routed. See column 3, lines 9-30, column 6, lines 42-61.

The second user (caller) may get a choice ("short menu") of transfer addresses (terminal 33, voicemail 34, receptionist 35, secretary 36; Figure 3) to which the second user can be re-routed. See column 6, lines 42-61.

As to **claims 26 and 34**, they are the corresponding apparatus claims of method *claims 9 and 17*; therefore, the same reasons explained above are applied.

Regarding **claims 10-16 and 27-33**, McLampy et al. discloses everything claimed as applied above (see *claims 1 and 18*). In addition, the transfer address includes a "hierarchy" of alternate addresses, such as the same terminal (first address), another terminal (address having an alternate first user address for voice communication), voicemail (address at which the second user may leave a message), receptionist (address at which the second user may reach a third

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party), secretary (third party), *inter alia*. The third party and the first address (user) can be part of the same organization; therefore, can be characterized as a same "specific class of user". See column 1, lines 36-45, column 2, lines 26-36, column 5, lines 3-7, column 6, lines 42-61, column 9, lines 1-5.

Regarding **claim 35**, McLampy et al. discloses everything claimed as applied above (see *claim 18*). In addition, the monitoring is performed at the switching center (switch); therefore, the means for monitoring are located in the switching center. See column 4, lines 10-18, column 5, lines 15-16, column 6, lines 42-61.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claims 6-7, 23-24** are rejected under 35 U.S.C. 103(a) as being unpatentable over McLampy et al. (US Patent Number 5,862,208) in view of the knowledge generally available to one of ordinary skill in the art.

Regarding **claims 6 and 23**, McLampy et al. discloses everything claimed as applied above (see explanation for *claims 5 and 22*). As explained above, McLampy et al. allowing a predetermined period of time for the re-connection. However, fails to particularly teach that the predetermined period of time is sufficient to allow the battery of the mobile terminal to be changed.



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However, the examiner contends that one skilled in the art would easily recognize that a mobile terminal cannot be successfully operated with a drained battery or a battery not having the proper level of power. The fastest conventional solution to this problem is to replace the battery. The replacement battery can be ready and handy to the user of mobile terminal. One with ordinary skill in the art would replace the battery without delay.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to make the predetermined period of time sufficient to the battery of the mobile terminal to be changed, because ① a mobile terminal cannot be successfully operated with a drained battery, ② it is the fastest conventional solution, and ③ the replacement battery can be ready and handy to the user.

Regarding **claims 7 and 24**, McLampy et al. discloses everything claimed as applied above (see explanation for *claims 3 and 21*). In addition, McLampy et al.'s method further includes placing the mobile wireless connection on hold; column 3, lines 20-21, and column 6, line 57. Further, McLampy et al. teaches that the system attempts to re-establish the call connection; 6, lines 56-59. The trigger event or condition is, for example, "signal lost", or low battery, as explained above.

However, McLampy et al. fails to particularly teach that the attempt is made when the condition is no longer satisfied.

However, the examiner contends that the best re-connection probability is achieved when the signal is back or the battery is hi (as opposed to "signal lost", or low battery), i.e., when the condition is no longer satisfied. Why to waste time and resources trying to re-connect if the re-

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connection is not possible due to that the signal is still lost (for example, below minimum thresholds; column 1, lines 30-35 of McLampy et al.), or the battery is still low?

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made: attempting to re-establish the mobile wireless connection when the condition is no longer satisfied, for the purpose of saving time and system resources, and the advantage of achieving the best re-connection probability.

***Citation of Pertinent Prior Art***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Alperovich et al.** (US Patent Number 6,385,469) discloses a system and method for rerouting a call;

**MeLampy et al.** (US Patent Number 5,566,236) discloses a system and method for re-establishing a disconnected telephone communication.

***Conclusion***


11. Any inquiry concerning this communication from the examiner should be directed to Eliseo Ramos-Feliciano whose telephone number is 703-305-0078. The examiner can normally be reached from 8:00 a.m. to 5:30 p.m. on 5-4/9 1st Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Erika A. Gary, can be reached on (703) 308-0123. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**ELISEO RAMOS-FELICIANO**  
**PATENT EXAMINER**

ERF/erf  
May 3, 2004.

  
**ERIKA GARY**  
**PATENT EXAMINER**